REMARKS

Applicants previously presented claims 13-16 and 23-26 for examination. The above-identified Office Action accepted drawings received, which Applicants acknowledge with gratitude, and rejected claims 13-16 and 23-26.

Applicants greatly appreciate the Examiner's well-thought out comments and assistance regarding issues in the above-identified application. In this Reply, Applicants have amended claims 13-16 and 23-26; added new claims 33-46; and responded to the rejections. Accordingly, claims 13-16, 23-26 and 33-46 are pending for examination. Applicants respectfully request that the Examiner reconsider the application in light of the amendments and the remarks expressed herein.

Information Disclosure Statement

A prior office action dated January 20, 2006 indicated that a set of references previously submitted were not legible. Those references were re-submitted with another Form PTO 1449. In a more recent prior office action dated May 11, 2007, a number of the references were crossed out from the another Form PTO 1449.

The current Office Action suggested that Applicants should resubmit the crossed-out references again. Applicants have complied with the suggestions by re-submitting the references again, together with a new Form PTO 1449. Upon review, if appropriate, Applicants respectfully request returning the initialed version of the new PTO Form 1449.

Support for the Claim Limitations

To expedite the prosecution, Applicants have amended a number of the claims. Support for the amendments can be found, for example, in U.S. Pat. No. 5,863,208 (the '208 Patent, issued from U.S. Patent Application No. 08/675,391), which was incorporated by reference into the current application when the current application was filed. A number of claims have been selected for discussion below to show their support in the specification.

The amended claim 13 includes the additional features of "selecting the specific area of the subject for the user to work on for a second time." These features are supported in numerous areas of the specification, for example,

> In one embodiment, the present invention selects an un-learnt line-item, and generates detailed learning materials for the un-learnt line-item. Then a learnt line-item is selected based on one or more learnt-line-item-selection rules, depending on factors such as the time elapsed from the time when the student learnt that line-item... (Col. 2, lines 5-10 of the '208 Patent)

The amended claim 14 includes the additional features of "the subject includes a broad area and a narrow area, with the subject broader than the broad area, and with the broad area broader than the narrow area". These features are supported in numerous areas of the specification, for example,

> "In one embodiment, the subject is divided into major-topics, with each major-topic subdivided into minor-topics, and with each minor-topic further subdivided into line-items....
> High School Algebra (the major-topic)
>   (Minor-topics under the major-topic)
>   Decimal Numbers
>   Polynomials
>   Linear Equations
>   Quadratic Equations
>   ...
>   Integers
>   (Line-items under the minor-topic of integers)
>   Addition & Subtraction (Difficulty level 1)
>   Multiplication (Difficulty level 2)
>   Division (Difficulty level 2)
>   Prime Numbers (Difficulty level 3)
>   Factorization (Difficulty level 3)
>   Common Divisor (Difficulty level 4)"
>   (Col. 3, lines 11-35 of the '208 Patent)

In this example, the subject can be Mathematics; a broad area can be Integers; and a narrow area can be "Addition and Subtraction." An illustration of different areas is now shown in the newly added Figure 6.

The amended claim 15 includes the additional features of "the method further comprises transmitting at least a portion of the materials via a network to a device to be presented, and wherein the network includes a private network and a public network." These features are supported in numerous areas of the specification, for example,

FIG. 3A shows one embodiment of a system 150 implementing the present invention, preferably in software and hardware. The system 150 includes a server computer 152 and a number of client computers, such as 154. Each client computer communicates to the server computer 152 through a dedicated communication link, or a computer network 156. (Col. 5, lines 31-36 of the '208 Patent)

The network includes the internet, an intranet, the world wide web and other forms of networks. (Col. 5, lines 47-49 of the '208 Patent)

Different components of the present invention can be in different elements shown in FIGS. 3A-B. For example, the presenter 114 and the assessor 112 can be in a client computer; the selector 102, the question generator 110, the study-plan generator 108, and the line-item storage-medium 106 can be in the server computer 152. (Col. 5, lines 50-55 of the '208 Patent)

The new claim 33 includes the features of "the specific area is selected for the second time depending on a time elapsed since the user has been assessed to have achieved at least a passing grade or to have understood the specific area." These features are supported in numerous areas of the specification, for example,

> "In one embodiment, the learnt line-item is selected depending on the time elapsed from the time when the line-item is re-classified from the un-learnt to the learnt mode (box 300)." (Col. 9, lines 10-14, of the '208 Patent)

The new claim 34 includes the additional features of "wherein the specific area is selected for the second time depending on the time elapsed being more than a predetermined duration of time." These features are supported in numerous areas of the specification, for example,

> In one embodiment, the learnt line-item is selected depending on the time elapsed from the time when the line-item is re-classified from the un-learnt to the learnt mode (box 300). The selection process dis-favors the line-item that has just been re-classified because presumably the line-item is still fresh in the student's mind. As time passes, the student's memory begins to fade, and should be refreshed. (Col. 9, lines 10-17, of the '208 Patent)

The new claim 39 includes the additional features of "wherein the specific area can be repeatedly selected for the user to work on, depending on the number of times the specific area has been previously selected for the user to work on." These features are supported in numerous areas of the specification, for example,

> "In yet another embodiment, selecting a learnt line-item depends on whether that learnt line-item has been selected before, as shown in the review-counter (box 308). The value in the review-counter does not include one or more prior selections of the line-items when the line-item was in its un-learnt mode. The

14

selection process discourages re-selecting a line-item that has been selected before. One way to achieve this result is to multiply the weight factor affecting which line-item to select by

$$1/(\text{the value in the review-counter of that line-item} + 1).$$

The higher the factor, the lower the probability that the corresponding line-item is selected. Thus, the above equation reduces the probability of selecting a line-item that has been reviewed before." (Col. 10, lines 32-45 of '208 Patent)

Claim Rejection under 112

Claims 13-16 and 23-26 were rejected under 35 USC 112, first paragraph, as allegedly failing to comply with the enablement requirement. Specifically, on its page 2, paragraph 4, the Office Action asserted that (a) the limitation "after selecting the one or more areas, selecting the specific area of the subject to work on" was a reoccurring never ending cycle; and (b) the specification failed to mention nor did it explain how the loop of repeated selection would end. Applicants respectfully disagree.

Applicants incorporate arguments in prior office action response

As explained in a prior office action response Applicants submitted on July 26, 2007, which is incorporated herein by reference, Applicants do not believe that a never-ending cycle has been claimed.

The words "initial" and "for a second time" have been added to further clarify

In any event, though not necessary, to prevent any possibility of ambiguity, Applicants have amended the independent claims to include the limitations of "after the initial selection and presentation ... selecting the specific area of the subject for the user to work on for a second time ...." Applicants submit that the additional words would further remove any remote possibility of a "never ending cycle."

No Lack of support

As to the specification failing to explain how the loop of repeated selection would end, again Applicants reiterate that no loop of never ending cycle has been claimed. Also, the claims as amended (i.e., for example, to include the terms "initial" and "for a second time") make it explicitly clear that a never ending cycle is not being claimed.

Nevertheless, Applicants still would like to clarify any misunderstanding in the Office Action, by pointing to, for example, numerous descriptions in the '208 Patent.

For example, Figure 7 in the '208 Patent shows a number of examples to determine when a learnt line item is selected. One embodiment depends on the time when the line-item is classified as learnt, in Col. 9, lines 22-33, of the '208 Patent:

> "the selection process dis-favors the line-item that has been re-classified long time ago because presumably the student has learnt other more difficult line-item during the interim period. This is similar to a student learning a subject in a semester. After the end of the semester, the student stops reviewing the subject, and starts studying a more difficult subject. Typically, a semester is about three months or twelve weeks. Thus, in one embodiment, the selection process begins to dis-favor reviewing the line-item that has been re-classified more than twelve weeks ago."

Another embodiment depends on a review counter 308 in Col. 10, lines 32-45, of the '208 Patent as described above.

Thus, the specification has taught and suggested numerous ways to implement the claimed invention, such as ways to diminish the chance of re-selecting an area to be reviewed.

As a side note, on page 5, paragraph 13, the Office Action alleged that, "The applicant argues that the invention is linear, for which means that it is only used for one specific area of a subject and no other area of a subject is studied afterwards, making irrelevant even mentioning other areas of study." It is unclear what the Office Action meant. However, Applicants have not argued any linearity as to the invention, where the invention is only used for one area of a subject and not another area of a subject.

Based on the above discussion, Applicants submit that the 112 rejections should be withdrawn.

Claim Rejection under 102

Claims 13-16 and 23-26 were rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Siefert (US 5,904,485). For at least the reasons set forth below, Applicants respectfully disagree with the rejections of these claims.

In general terms, Siefert pertains to teaching a student in a style that fits the student. It has an Intelligent Administrator (IA) that helps determine what to present to the student. For example, if "the student has successfully completed 12 of 60 lessons in

analytic geometry", "the IA decides that lesson number 13 should be given next."[1] After giving the next lesson to the student, the IA assesses the student. Based on the assessment, if the IA concludes that the student does not understand the lesson, such as falling below a certain standard, the lesson will be "presented in a different way."[2] "If that fails, after a predetermined number of attempts, then the IA patches the student into a Subject Master Expert."[3]

In other words, from a general sense, Siefert's system teaches a student. If the student does not understand, the system teaches the student again in a different way. If that still does not work, the system lets an expert teach the student.

Applicants incorporate arguments in prior office action response

As explained in a prior office action response Applicants submitted on July 26, 2007, which is incorporated herein by reference, Siefert does not teach or suggest numerous features in Applicants' claimed invention. Applicants do not want to repeat any of the arguments in the prior office action response. However, Applicants would like to address new issues raised in the Office Action, and introduce new arguments.

Nothing in Siefert teaches the specific area is selected a second time depending on its difficulty level

The Office Action has brought in a new citation from Siefert (col. 17:26-30) in addition to Siefert's Table 4.2 item 3 for its rejection regarding review. Item 3 under Intellectual Skill in Table 4.2 states "scheduling occasions for spaced reviews", and col. 17:26-30 states "building in occasional reviews of what has been learned." Though Siefert has used the word "review", Siefert has not taught or suggested (a) how such reviews are implemented, (b) when such reviews would be performed, (c) under what conditions such reviews would be performed, and (d) what would be covered in such reviews.

Siefert provides no details regarding its "scheduling occasions for spaced reviews." Thus, Siefert has not taught or suggested "after selecting the one or more other

---

[1] Col. 9, lines 16-19, in Siefert.
[2] Siefert's Abstract.
[3] Col. 9, lines 65-67, in Siefert.

areas of the subject for the user to work on, selecting the specific area of the subject for the user to work on for a second time, wherein the specific area has a difficulty level, and the specific area is selected for the user to work on for the second time depending on the difficulty level of the specific area", as in Applicants' claim 13.

Nothing in Siefert teaches the specific area is selected a second time depending on a level achieved by the user in the assessment

Claim 23, as amended, requires that "after the one or more other areas are selected for the user to work on, the specific area of the subject is selected for the user to work on for a second time, and wherein the specific area is selected for the user to work on for the second time depending on a level achieved by the user in the assessment of the user, not just the user being assessed to have achieved at least a passing grade or to have understood the specific area." As explained above, Siefert provides no details regarding its "scheduling occasions for spaced reviews." Thus, Siefert has not taught or suggested these features of claim 23.

Nothing in Siefert teaches the suggestion can be on a broad area

Though not necessary, to expedite the prosecution, Applicants have further narrowed claims 14 and 24 to include the following limitations (a) the subject includes a broad area and a narrow area, with the subject broader than the broad area, and with the broad area broader than the narrow area, and (b) the suggestion can be on the broad area.

In paragraph 9 on page 4, the Office Action incorrectly argues that Siefert, in its Col. 9, lines 10-19, teaches "the subject includes a broad area (i.e., analytic geometry) and a narrow area (i.e., lesson number 13), with the broad area covering the narrow area; and the suggestion can be on the broad area or the narrow area".

In those sections, Siefert teaches the IA deciding that the student has successfully completed 12 of 60 lessons in analytic geometry, and lesson number 13 should be given next. In other words, there are 60 lessons in analytic geometry, and lesson 13 should be the next lesson.

When Siefert selects lesson 13 (the alleged narrow area), Siefert has inherently selected (a) the subject (analytic geometry), (b) the broad area as alleged by the Office

Action, and (c) the narrow area (lesson 13) all together. Thus, Siefert does not distinguish a broad area from a narrow area, let alone suggesting a broad area for a user.

<u>Paragraph 15 of the Office Action is incorrect that Applicants have not claimed area X being selected independent of whether the user has been assessed to have achieved a certain satisfactory level in area Y</u>

Applicants would like to address a new issue raised in the Office Action regarding independent claims 13 and 23. In Paragraph 15, the Office Action alleged that Applicants had not claimed the feature of "area X being selected independent of whether the user has been assessed to have achieved a certain satisfactory level in area Y". Applicants would like to call to the attention of the Patent Office, the following limitations previously in claims 13 and 23 (currently moved to dependent claims 16 and 26):

> the specific area is selected for the user for the second time without depending on whether the user has been assessed to have achieved a certain satisfactory level of understanding in the one or more other areas

Applicants are not clear why the Office Action states that the claimed limitations were not recited.

For at least the reasons set forth above, Applicants submit that independent claim 13 with its dependent claims 14-16 and 33-41; and independent claim 23 with its dependent claims 24-26 and 42-46, are patentable over Seifert. Accordingly, Applicants respectfully request that the 102(e) rejections of these claims be reconsidered and withdrawn.
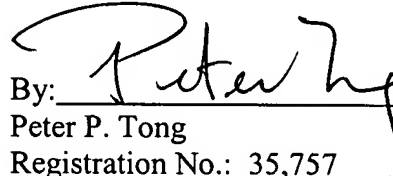
<u>Summary</u>

It is submitted that claims 13-16, 23-26 and 33-46 are patentably distinct from the cited reference. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

In the event that the Examiner, upon reconsideration, determines that an action other than an allowance is appropriate, the Examiner is requested and authorized to telephone Applicants' representative prior to taking such action, if the Examiner feels that such a telephone call will advance the prosecution of the present application.

Any required fee in connection with the filing of this response is to be charged to Deposit Account No. 50-0727.

Respectfully submitted,

By: _____

Peter P. Tong
Registration No.: 35,757
1807 Limetree Lane
Mountain View, CA 94040
(650) 625-8192